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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,818	09/12/2003	Brent McKay	0270101	7046
25700 7590 07/25/2007 FARJAMI & FARJAMI LLP 26522 LA ALAMEDA AVENUE, SUITE 360 MISSION VIEJO, CA 92691			EXAMINER HOLTON, STEVEN E	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 07/25/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/660,818	Applicant(s) MCKAY, BRENT	
	Examiner Steven E. Holton	Art Unit 2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17, 21-23, 25-37, 39-51 and 53-83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-23, 25-37, 39-51 and 53-83 is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 9-14 and 16 is/are rejected.
- 7) ☒ Claim(s) 2-10, 15 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is made in response to applicant's amendment filed on 5/7/2007. Claims 1-17, 21-23, 25-37, 39-51, and, 53-83 are currently pending in the application. An action follows below:

#### ***Claim Objections***

2. Claims 63, 65, 68, and 70 are objected to because of the following informalities:

Claims 63, 65, 68, and 70 all contain minor grammatical errors, in similar phrases. Claim 63, line 4, the phrase "wherein the determining the first primary value for..." should be "wherein determining the first primary value...". This is similar to claim 73. This same objection holds for claims 65, 68, and 70.

Claim 63 is also further objected to on the phrase "generating a data base of a cumulative average pixel values based on..." The phrase should be "generating a data base of cumulative average pixel values..." The pixel values are a plural and therefore 'a' is unnecessary. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1, 4, 5, 9-13, 14, and, 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Regarding claims 14 and 16 the claims are directed to methods that determine values of an image history but fail

to produce a tangible result from the calculations. The steps as found in claims 1, 14, and, 16 merely monitor a history and then determine values based on the history. The claims lacks a tangible result from the calculations and are therefore currently considered nonstatutory material. Claims 4, 5, and, 9-13 are dependent from claim 1, but similarly merely provide further calculation steps lacking a tangible result from the calculations. Therefore, these claims are also rejected under 35 U.S.C. 101.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 11, 12, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Teronai et al. (JP 11-175022), hereinafter Teronai. A computer translation of the description of the invention is provided with this Office Action.

Regarding claims 1 and 16, Teronai discloses a plasma display panel with pixels (Fig. 1, element 7), an interface in communication with the display panel for driving the display (Fig. 2, element 6) and determining burn values (age values) for each of the pixels of the display and identifying pixels with low and high primary burn values which have been burned more or less than other pixels in the display (paragraphs 36 to 42). Teronai uses a high or low signal to indicate pixels with higher and lower burn amounts (ages) and depending on the signals the display controls the pixels differently. The high

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and low signals indicate a determination of pixels that have been burned to a greater degree than other pixels.

Regarding claim 11, Teronai discloses measuring an image history to determine the burn values (paragraph 36). Teronai uses a counter based on the displayed images to record the burn values of the pixels:

Regarding claim 12, Teronai discloses using a plasma display panel (Fig. 1, element 7).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teronai.

Regarding claim 13, Teronai discloses connecting a single plasma display panel to a controlling system for display images, but does not expressly disclose using a plurality of displays in communication with a computer. The Examiner takes Official Notice that it is well known in the art that multiple display devices can be connected to a single computer system with proper connections and controlling software. At the time of invention it would have been obvious that the single display system described by Teronai could be increased to utilize multiple display panels depending on the application and need for the display system.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection based on newly found prior art. The Examiner notes that these claims were previously indicated as allowable, but are no longer based on the newly found prior art and further consideration of the claims.

### ***Allowable Subject Matter***

7. Claims 21-23, 25-37, 39-51, and, 53-83 are allowed.

Claims 2-10, 15, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The present invention is directed to a method of operating a display device to reduce burn-in of images by uneven aging of pixels when the display is operated.

Claims 21, 35, and 49 identify the uniquely distinct features "determining a third primary value for a third pixel", "determining that the third primary value for the third pixel is lower than each of the first primary value and the secondary primary value of the second pixel", and selecting secondary values based on the difference between the third primary value and the first primary value, or the third primary value and the second primary value. The closest prior art, Goldberg, Grimes et al. (USPgPub: 2003/0142212) and Shigeta (USPgPub: 2002/0030674) disclose methods of reducing burn-in differences between pixels using average calculations of the pixels in the display, either

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singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Claims 63, 68, and, 73 identify the features using a data base of average pixel values based on the image history and displaying the conditioning input on the display for a secondary period of time to reduce a difference between the light output of different pixels within the display. The closest prior art, Teronai, Grimes et al. (USPgPub: 2003/0142212) and Shigeta (UsPgPub: 2002/0030674) disclose methods of reducing burn-in differences between pixels using average calculations of the pixels in the display, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Claims 65, 70, and, 75 identify the features of basing the correction values on manufacturing parameters of the display panel and displaying the conditioning input on the display panel to reduce a difference between a light output of the first and second pixels. The closest prior art, Teronai, Grimes et al. (USPgPub: 2003/0142212) and Shigeta (UsPgPub: 2002/0030674) disclose methods of reducing burn-in differences between pixels using average calculations of the pixels in the display, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Claims 66, 71, and 76, identify the features of determining conditioning values for first and second pixels within a static region of the display and the display having dynamic and static regions and outputting the conditioning values to reduce the difference of light output between the different pixels. The closest prior art, Teronai, Grimes et al. (USPgPub: 2003/0142212) and Shigeta (UsPgPub: 2002/0030674)



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disclose methods of reducing burn-in differences between pixels using average calculations of the pixels in the display, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Claims 78, 80, and, 82 identify the features of determining a conditioning output where the average value of the first pixel for the primary and secondary period of time is approximately equal to one-half of a bit depth of the first pixel and displaying the conditioning input on the display to reduce the difference between a light output of first and second pixels of the display. The closest prior art, Teronai, Grimes et al. (USPgPub: 2003/0142212) and Shigeta (UsPgPub: 2002/0030674) disclose methods of reducing burn-in differences between pixels using average calculations of the pixels in the display, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven E. Holton whose telephone number is (571) 272-7903. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

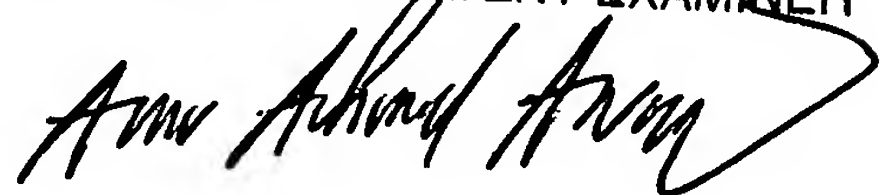


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven E. Holton  
Division 2629  
July 22, 2007

AMR A. AWAD  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Amr A. Awad", written over a horizontal line.